

# High Energy Fe Battery System for Telecom

### **U3 Series**

- ETSI standard compliant
- 3U rack-mount design
- High energy density and operational reliability
- Lifetime more than 10 years at +25°C
- Build-in battery control for efficient operation
- Comprehensive communication system
- Compatible with standard telecom equipment
- ROHS compliance
- Supports parallel connection between batteries



ACT U3 Series high energy, high performance backup battery is a 3U rack-mounted Fe battery system designed to provide power back-up for telecom equipment. It has excellent safety, high energy density, a long life cycle, and good temperature performance.

It features excellent safety and high reliability, and is applicable for large base stations, data center, energy storage applications, outdoor cupboards, and wind-solar hybrid system.

This battery saves on cabinet space, and has a low weight for pole-mounted sites. It does not require an active cooling system, and its simplified power system does not require a BFU.

U3 Series uses the RS485 communication interface, allowing users to monitor the battery's current, voltage, temperature, and other operation information remotely.

The battery line complies with comprehensive international quality system: ISO 14001/ISO9001/TS16949 and is carried out on established industrial production lines, which satisfies the strictest requirement on the Lithium ion battery.



#### **Features**

- Current detection while charging and discharging
- Hardware protection
- Discharge control
- Charge control
- Cell balance
- Reverse protection
- Cell voltage detection
- Temperature detection
- Communication(RS485)
- Operating state display of system (LED)
- PACK voltage detection
- Fault alarm

#### **Telecom Application**





#### **Specifications**

#### **Nominal Characteristics**

 Nominal Voltage
 48 V

 Capacity
 50 [C/5][Ah]

 Energy
 2560 [C/5][WH]

**Electrical Characteristics** 

Voltage Window  $40 \sim 57.6 \text{ V}$  Charge Voltage 57.6 V Max Charge Current 1 C Max Output Power 2500 W

Recharge Time  $10A \times 6 \text{ hr (standard)}$ 

**Discharge Current at Various Back-up Times** 

 1 hr
 1 C

 2 hr
 0.5 C

 4 hr
 0.25 C

**Operating Conditions** 

Lifetime (at +25°C) >15 years Cycle Life (100% DOD, +25°C) 2800

Operating Temperature Charge: -10 ~ +60°C Discharge: -20 ~ +60°C

Transport Regulation Compliance UN3480

Storage Temperature and Duration 12 months at +25°C

6 months at +40°C EMC Standard Compliance EN 6100 Chapter

4.2, 4.3, 4.5, 4.6 / EN55022 Safety Standard Compliance CE / UL 1642 / UN 38.3

Protection Class IP30

Dimensions (W  $\times$  H  $\times$  D) 482.6 mm  $\times$  130 mm  $\times$  400 mm

Weight 35 kg

#### **Ordering Information**

**Mechanical Characteristics** 

#### Product name Product description

U3C-50P-A U3C Series 50AH Standard Backup Battery Power 3U rack-mount Fe battery system

for telecom application







#### **Ascent Communication Technology Ltd**

#### **AUSTRALIA**

140 William Street, Melbourne Victoria 3000, AUSTRALIA Phone: +61-3-8691 2902

#### **CHINA**

Unit 1933, 600 Luban Road 200023, Shanghai CHINA Phone: +86-21-60232616

#### **EUROPE**

Pfarrer-Bensheimer-Strasse 7a 55129 Mainz, GERMANY Phone: +49 (0) 6136 926 3246

#### **HONG KONG SAR**

Unit 9, 12<sup>th</sup> Floor, Wing Tuck Commercial Centre 177 Wing Lok Street, Sheung Wan, HONG KONG Phone: +852-2851 4722

#### **USA**

2710 Thomes Ave, Cheyenne WY 82001, USA Phone: +1-203 816 5188

#### **VIETNAM**

15 /F TTC Building, Duy Tan Street, Cau Giay Dist. Hanoi, VIETNAM Phone: +84 243 795 5917

WEB: www.ascentcomtec.com EMAIL: sales@ascentcomtec.com

Specifications and product availability are subject to change without notice. Copyright © 2016 Ascent Communication Technology Limited. All rights reserved. Ver. ACT\_U3C LFP\_Battery\_Datasheet\_V1b\_Apr\_2016